

Attorney Docket No.: PTQ-0012
Inventors: Adams et al.
Serial No.: 09/177,711
Filing Date: October 23, 1998
Page 4

C3
contd.

vasodilate engorgeable genital tissue while reducing or eliminating pain sensed by nociceptive tissue in close proximity to the engorgeable genital tissue. --

REMARKS

Claims 35-40, 45-51 and 53-58 are pending in the instant application. Claims 35-40, 45-51 and 53-58 have been rejected. Claims 35, 53, 54, 55 and 56 have been amended. New claim 59 has been added. No new matter has been added by these amendments. Reconsideration is respectfully requested in light of these amendments and the following remarks.

I. Rejection of Claims 35-40, 45-51 and 53-58 under 35 U.S.C. § 103(a)

Claims 35-40, 45-51 and 53-58 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over both Anfoóssi et al. (Gen. Pharmac. 1994 25(6):1093-1100) and Maurice et al. (Molec. Pharma. 1990 37(5):671-681) in view of Snyder et al. (U.S. Patent 5,439,938), Gozes et al. (U.S. Patent 5,217,953) and Stamler et al. (U.S. Patent 5,380,758). The Examiner suggests that the primary references by Anfossi et al. and Maurice et al. teach methods for augmenting the effects of cAMP and cGMP by using one or more

Attorney Docket No.: PTQ-0012
Inventors: Adams et al.
Serial No.: 09/177,711
Filing Date: October 23, 1998
Page 5

agents. The Examiner has acknowledged the deficiency of these references in that there is no teaching of use of these agents for erectile dysfunction. However, the Examiner suggests that secondary references by Stamler et al., Gozes et al. and Snyder et al. teach agents which augment the effect of cGMP or cAMP for use in treating erectile dysfunction. Thus, the Examiner suggests that it would have been *prima facie* obvious to a person of ordinary skill in the art, at the time the claimed invention was made, to modify the method taught in the primary references for treating erectile dysfunction by administering the active agent to a subject. The Examiner suggests that a person of ordinary skill in the art would have been motivated to modify the method taught in the primary references for treating erectile dysfunction because agents augmenting the effect of cAMP and/or cGMP are known to be useful for treating erectile dysfunction.

Applicants respectfully traverse this rejection.

In accordance with MPEP § 2143, to render an invention *prima facie* obvious, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or combine the reference teachings. Second, there must be a reasonable

Attorney Docket No.: PTQ-0012
Inventors: Adams et al.
Serial No.: 09/177,711
Filing Date: October 23, 1998
Page 6

expectation of success. Finally, the prior art references when combined must teach or suggest all the claim limitations. The cited combination of prior art fails to meet these criteria with respect to the instant invention.

The instant invention is related to a method for inducing effective erection while reducing or eliminating pain associated with erection, particularly the pain associated with erection following administration of a prostaglandin, in patients suffering from erectile dysfunction. See specifically page 13, lines 13-18 as well as pages 13 through 18 wherein these effects are demonstrated in multiple case studies. In an earnest effort to advance the prosecution of this case, Applicants have added new claim 59 to clarify that the instant invention relates to a method for administering one or more agents which vasodilate engorgeable genital tissue while reducing or eliminating pain sensed by nociceptive tissue in close proximity to the engorgeable genital tissue. Further, Applicants have amended pending claims 35, 53, 54, 55 and 56 to clarify that the method of the present invention also relates to decreasing or eliminating pain associated with erection. Applicants have also amended claim 35 to clarify that the agents augment the effect of cAMP in engorgeable genital tissue as well as augment the effect of cGMP in nociceptive tissue in

Attorney Docket No.: PTQ-0012
Inventors: Adams et al.
Serial No.: 09/177,711
Filing Date: October 23, 1998
Page 7

close proximity to the engorgeable tissue. Support for additional amendments to claim 35 can be found throughout the specification and in particular in claim 20, now canceled.

Nowhere do the prior art references teach or suggest agents with these abilities which produce an erection while decreasing or eliminating pain associated with the erection.

The primary references cited in the rejection relate solely to platelets and their aggregation. As acknowledged by the Examiner, there is no teaching or suggestion of erectile dysfunction or treatment thereof in these references. Further, these references focus on the effects of agents on intraplatelet cAMP and cGMP levels, a measurement irrelevant and not predictive of the effects of such agents on engorgeable genital tissue systems and tissue systems adjacent thereto.

The cited secondary references fail to remedy the deficiencies in the primary references. Snyder mentions that GTN is known to be useful for treating erectile dysfunction; Gozes et al. relates primarily to an antagonist of VIP and merely mentions in the background that VIP may be helpful in relieving penile dysfunction; Stamler et al. relates to the administration of a therapeutically effective amount of an S-nitrosothiol compound to relax corpus cavernosum smooth muscle or to treat impotence. However, there is

Attorney Docket No.: PTQ-0012
Inventors: Adams et al.
Serial No.: 09/177,711
Filing Date: October 23, 1998
Page 8

no teaching or suggestion in these references of the use of these agents to produce an erection while decreasing or eliminating pain associated with the erection.

Thus, the cited combination of references fails to teach or suggest all the limitations of the claims as amended. Further, the cited prior art provide no reasonable expectation of success that administration of these agents will produce an erection while decreasing or eliminating pain associated with the erection. In fact, as taught at page 11, lines 19-22, of the specification, references such as Snyder et al. concerning reversing priapism with NO synthase inhibitors, as well as studies on analgesics and NO, actually provide an expectation of **increased** pain with administration of the claimed agents. Accordingly, the cited combination of prior art can not render obvious the instant claims.

Withdrawal of this rejection under 35 U.S.C. § 103(a) is respectfully requested in light of the amendments to the claims and the above arguments.

II. Conclusion

Applicants believe that the foregoing comprises a full and complete response to the Office Action of record. Accordingly,

Attorney Docket No.: PTQ-0012
Inventors: Adams et al.
Serial No.: 09/177,711
Filing Date: October 23, 1998
Page 9

favorable reconsideration and subsequent allowance of the pending claims is earnestly solicited.

Respectfully submitted,



Kathleen A. Tyrrell
Registration No. 38,350

Date: November 15, 2000

Licata & Tyrrell P.C.
66 E. Main Street
Marlton, New Jersey 08053
(856) 810-1515